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EXAMINER	
MOORE, IAN N	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/726,200	RYAN, PATRICK D.	
	Examiner	Art Unit	
	IAN N. MOORE	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it recites a legal phraseology "**comprises**" in line 4. Correction is required. See MPEP § 608.01(b). (*NOTE- This issue has been raised in the previous action*).

Claim Objections

2. Claims 1-22 are objected to because of the following informalities:

Claim 1 recites **"and/or"** in line 9. It is suggested to clarify the use of words instead of "/".

Claim 12 recites **"and/or"** in lines 12 and 14. It is suggested to clarify the use of words instead of "/".

Claim 14 recites **"and/or"** in line 2. It is suggested to clarify the use of words instead of "/".

Claims 2-11, 13 and 15-22 are also objected since they are depended upon objected claims 1 and 12 as set forth above.

Appropriate correction is required.

Claim Rejections - 35 USC § 102 (b)

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 5, 12, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Focsaneanu (US005828666A).

Regarding Claim 1, Focsaneanu discloses a communication method for use by a first gateway (see FIG. 8, Access module 234; see FIG. 9, access module 306/308 processing the steps/methods) to communicate with a second gateway (see FIG. 9, communicating with Access module 308/306) over a packet network (see FIG. 9, via data/packet network 304; see col. 7, line 60-65; see col. 9, line 3-10), said first gateway having a plurality of modes of operation including a data mode and a voice mode (see FIG. 8, access node 234 or 306/308 processing data/fax/computer service/mode and voice/POTS (Plain Old Telephone System) service/mode; see col. 7, line 45-50; see col. 9, line 9-65), wherein said first gateway is configured differently for each of said modes of operation (see FIG. 8, access module is set-up/configure differently/separately for data service and voice service operation/processing; see col. 7, line 60 to col. 8, line 20), said method comprising:

configuring said first gateway to said data mode of operation for a call (see col. 9, line 36- to col. 10, line 5; see FIG. 8, a combined system of processor 246 and controller 252 setting-up/configuration access module 234/306 a default state for data service call/connection);

receiving a call request from said second gateway (see FIG. 8, receiving a service request for a call/connection from access module 308/306; see col. 7, line 45 to col. 8, line 15; see col. 9, line 3-10);

placing said call (see FIG. 8, 9, setup/place a call/connection) to a user over a communication line (see FIG. 9, to user 300/302 on the line between two end users 300-302) in

response to said receiving said call request (see FIG. 8, when identifying a service request for a call/connection; see col. 7, line 45 to col. 8, line 15; see col. 9, line 3-10);

enabling said first gateway to detect human voice and/or silence on said communication line (see FIG. 8, 9, transceiver 238 of access module detecting/identifying voice/POTS, or silent/no-service at initiation on the line between two end users 300 and 302; see col. 7, line 45-67; see col. 9, line 3-10, 25-45, 55 to col. 10, line 12);

maintaining said first gateway configured according to said configuring in said data mode of operation for said call (see FIG. 8, the combined system of processor 246 and controller 252 continues/maintain the data service/operation mode for a call/connection) if said first gateway does not detect human voice or silence on said communication line (see FIG. 8, when there is no voice/POTS, or silent/non-service is detected/identified; see col. 7, line 45 to col. 8, line 15; see col. 9, line 55 to col. 10, line 30); and

reconfiguring said first gateway to said voice mode for said call (see FIG. 8, the combined system of processor 246 and controller 252 change/reconfigures the mode by dropping the data service/operation for a call/connection) if said first gateway detects human voice or silence on said communication line (see FIG. 8, when there is voice/POTS service is detected/identified; see col. 7, line 45 to col. 8, line 15; see col. 9, line 55 to col. 10, line 30).

Regarding Claims 4, Focsaneanu discloses wherein said data mode is a modem mode and said user is a modem device (see FIG. 8, data service is a modem service and subscriber/user is a computer modem or fax modem; see col. 7, line 45-60).

Regarding Claim 5, Focsaneanu discloses wherein said data mode is a modem mode and said user is a fax device (see FIG. 8, data service is a modem service and subscriber/user is a computer modem or fax modem; see col. 7, line 45-60).

Regarding Claim 12, Focsaneanu discloses a first gateway (see FIG. 8, Access module 234; see FIG. 9, access module 306/308) for communication with a second gateway (see FIG. 9, communicating with Access module 306/308) over a packet network (see FIG. 9, via data/packet network 304; see col. 7, line 60-65; see col. 9, line 3-10), said first gateway having a plurality of modes of operation including a data mode and a voice mode (see FIG. 8, access node 234 processing data/fax/computer service/mode and voice/POTS (Plain Old Telephone System) service/mode; see col. 7, line 45-50; see col. 9, line 9-65), wherein said first gateway is configured differently for each of said modes of operation (see FIG. 8, access module is set-up/configure differently/separately for data service and voice service operation/processing; see col. 7, line 60 to col. 8, line 20), said first gateway comprising:

a configuration module (see FIG. 8, a combined system of processor 246 and controller 252) configuring said first gateway to said data mode of operation for a call (see col. 9, line 36- to col. 10, line 5; setting-up/configuration access module 234 or 306/308 to a default state for data service call/connection);

a voice and/or silence detector (see FIG. 8, transceiver 238) enabled to detect human voice or silence on a communication line (see FIG. 8, 9,detecting/identifying voice/POTS, or silent/no-service at initiation on the line between two end users 300 and 302; see col. 7, line 45-67; see col. 9, line 3-10, 25-45, 55 to col. 10, line 12) when said first gateway places said call (see FIG. 8, 9, when access module 234 setup/place a call/connection) to a user on said

communication line (see FIG. 9, to user 300/302 on the line between two end users 300-302) in response to receiving a call request by said first gateway from said second gateway (see FIG. 8, when identifying a service request for a call/connection by access module 306/308 from access module 308/306; see col. 7, line 45 to col. 8, line 15; see col. 9, line 3-10);

wherein said configuration module maintains said first gateway configured according to said data mode of operation for said call (see FIG. 8, the combined system of processor 246 and controller 252 continues/maintain the data service/operation mode for a call/connection) if said voice and/or silence detector does not detect human voice or silence on said communication line (see FIG. 8, when there is no voice/POTS, or silent/non-service is detected/identified; see col. 7, line 45 to col. 8, line 15; see col. 9, line 55 to col. 10, line 30), and

said configuration module reconfigures said first gateway to said voice mode for said call (see FIG. 8, the combined system of processor 246 and controller 252 change/reconfigures the mode by dropping the data service/operation for a call/connection) if said voice and/or silence detector detects human voice or silence on said communication line (see FIG. 8, when there is voice/POTS service is detected/identified; see col. 7, line 45 to col. 8, line 15; see col. 9, line 55 to col. 10, line 30).

Regarding Claim 15, Focsaneanu discloses wherein said data mode is a modem mode and said user is a modem device (see FIG. 8, data service is a modem service and subscriber/user is a computer modem or fax modem; see col. 7, line 45-60).

Regarding Claim 16, Focsaneanu discloses wherein said data mode is a modem mode and said user is a fax device (see FIG. 8, data service is a modem service and subscriber/user is a computer modem or fax modem; see col. 7, line 45-60).

5. Claims 2, 11, 13 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Focsaneanu in view of Baumann (US 20030118008A1).

Regarding Claim 2, Focsaneanu discloses transmission over said packet network, and said maintain and said voice mode operation of said first gateway after said reconfiguration as set forth above in claim 1.

Focsaneanu does not explicitly disclose "informing said second gateway of said data mode operation of said first gateway".

However, sending ISP gateway sending busy signal to the caller via its gateway is so well known in the art. In particular, Baumann teaches information said second gateway (see FIG. 1, informs/notifies with a combined system of Media gateway A 3 and controller A 10) over said packet network (see FIG. through IP network 5) of said data mode of operation after said first gateway after said maintain said data mode configuration of first gateway (see FIG. 1, a combined system of gateways A sends notification to a combined system of gateways B regarding data/fax mode/form of operation after the controller assigns/maintain fax mode/form of operation; see page 2-3, paragraph 26,32,48) after said reconfiguration (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding voice mode/form of operation after the gateway A terminate the fax transmission and switches (i.e. reconfiguration) to voice mode/form transmission).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "informing said second gateway of said data mode operation of said first gateway", as taught by Baumann in the system of Focsaneanu, so that it would allow

changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

Regarding Claim 11, Focsaneanu discloses over said packet network, and said mode of operation of said first gateway if said first gateway detects human or silence on said communication as set forth above in claim 1.

Focsaneanu does not explicitly disclose "said first gateway informs said second gateway".

However, Baumann teaches informing said second gateway (see FIG. 1, communicates/notifies a combined system of Media gateway A 3 and controller A 10) over said packet network (see FIG. 1, through IP network 5) of said mode of operation of said first gateway if said first gateway detects human voice or silence on said communication (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding the mode/form of operation (i.e. voice) when the gateway A terminate the fax transmission (i.e. silent) or switches to voice transmission detecting of voice).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a first media gateway information the second media gateway", as taught by Baumann in the system of Focsaneanu, so that it would allow changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

Regarding Claim 13, Focsaneanu discloses over said packet network, and said configuration module maintains said data mode configuration, and said voice mode of operation of said first gateway after said configuration module reconfigures to said voice mode as set forth above in claim 12.

Focsaneanu does not explicitly disclose "informing said second gateway of said data mode operation of said first gateway".

However, sending ISP gateway sending busy signal to the caller via its gateway is so well known in the art. In particular, Baumann teaches said first gateway (see FIG. 1, a combined system of Media gateway B 4 and controller B 11) informs said second gateway (see FIG. 1, informs/notifies with a combined system of Media gateway A 3 and controller A 10) over said packet network (see FIG. through IP network 5) of said data mode of operation after said configuration module maintain said data mode configuration (see FIG. 1, a combined system of gateways A sends notification to a combined system of gateways B regarding data/fax mode/form of operation after the controller assigns/maintain fax mode/form of operation; see page 2-3, paragraph 26,32,48) , and said voice mode of operation of said first gateway after said configuration module (see FIG. 1, controller B 11) reconfigures to said voice mode (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding voice mode/form of operation after the gateway A terminate the fax transmission and switches (i.e. reconfiguration) to voice mode/form transmission).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide information the second media gateway, as taught by Baumann in the system of Focsaneanu, so that it would allow changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

Regarding Claim 22, Focsaneanu discloses over said packet network, and said mode of operation of said first gateway if said first gateway detects human or silence on said communication as set forth above in claim 12.

Focsaneanu does not explicitly disclose "informing said second gateway of said data mode operation of said first gateway".

However, Baumann teaches said first gateway (see FIG. 1, a combined system of Media gateway B 4 and controller B 11) informs said second gateway (see FIG. 1, communicates/notifies a combined system of Media gateway A 3 and controller A 10) over said packet network (see FIG. 1, through IP network 5) of said mode of operation of said first gateway if said first gateway detects human voice or silence on said communication (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding the mode/form of operation (i.e. voice) when the gateway A terminate the fax transmission (i.e. silent) or switches to voice transmission detecting of voice).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a first media gateway information the second media gateway", as taught by Baumann in the system of Focsaneanu, so that it would allow changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

6. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Focsaneanu (US005828666A) in view of Terajima (US005544234A).

Regarding Claim 3, Focsaneanu discloses said maintaining occurs if said first gateway does not detect human voice or silence on said communication line as set forth in claim 1.

Focsaneanu does not explicitly disclose "for a predetermined time".

However, Terajima teaches discloses said maintaining occurs if silence on said communication line for a predetermined period of time (see col. 9, line 46-65; see col. 15, line

25-35; see col. 22, line 15-20; see FIG. 20, S103; continue/maintain is fax/data mode if silence is detected for a predetermined period of time).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "for a predetermined time" as taught by Terajima in the system of Focsaneanu, so that it would provide automatic changeover function, as suggested by Terajima; see Terajima col. 2, line 30-65.

Regarding Claim 14, Focsaneanu discloses said configuration module maintains said data mode configurations if said voice and/or silent detector do not detect human voice or silence on said communication line as set forth in claim 1.

Focsaneanu does not explicitly disclose "for a predetermined time".

However, Terajima teaches discloses maintaining said data mode configurations if silence on said communication line for a predetermined period of time (see col. 9, line 46-65; see col. 15, line 25-35; see col. 22, line 15-20; see FIG. 20, S103; continue/maintain is fax/data mode if silence is detected for a predetermined period of time).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "for a predetermined time" as taught by Terajima in the system of Focsaneanu, so that it would provide automatic changeover function, as suggested by Terajima; see Terajima col. 2, line 30-65.

7. Claim 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Focsaneanu in view of Hansen (US005940475A).

Regarding Claim 6, Focsaneanu discloses wherein said data mode is a modem mode and said user is a modem device (see FIG. 8, data service is a modem service and subscriber/user is a computer modem or fax modem; see col. 7, line 45-60)).

Fisher does not explicitly disclose "a text telephone modem".

However, having TTY (teletypewriter or text telephone (TTY), which also known as TDD (Device for Deaf) for deaf, hearing impaired, and/or speech impaired individual's communication is well known in the art. In particular, Hansen teaches said user is a TTY modem (see col. 2, line 5-29; see col. 3, line 51 to col. 4, line 5; TDD or TTY modem).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a TTY or TDD modem", as taught by Hansen in the system of Focsaneanu, so that it would provide enhance communication systems and process used by the deaf, hearing impaired, and/or speech impaired community; see Hansen col. 2, line 59-66.

Regarding Claim 17, Focsaneanu discloses wherein said data mode is a modem mode and said user is a fax device (see FIG. 8, data service is a modem service and subscriber/user is a computer modem or fax modem; see col. 7, line 45-60).

Fisher does not explicitly disclose "a TTY modem".

However, having TTY (teletypewriter or text telephone (TTY), which also known as TDD (Device for Deaf) for deaf, hearing impaired, and/or speech impaired individual's communication is well known in the art. In particular, Hansen teaches said user is a TTY modem (see col. 2, line 5-29; see col. 3, line 51 to col. 4, line 5; TDD or TTY modem).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a TTY or TDD modem, as taught by Hansen in the system of

Focsaneanu, so that it would provide enhance communication systems and process used by the deaf, hearing impaired, and/or speech impaired community; see Hansen col. 2, line 59-66.

8. Claim 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Focsaneanu in view of Wildfeuer (US006829244B1).

Regarding Claim 7, Focsaneanu discloses wherein said first gateway uses said data mode and said voice mode as set forth above in claim 1.

Focsaneanu does not explicitly disclose "a voice coder with higher bandwidth".

However, Wildfeuer teaches wherein in said data mode (see col. 5, line 42-45; modem mode) said first gateway (see FIG. 1, packet network gateway 106) uses a voice coder (see FIG. 1, PCM controller 112) with higher bandwidth than in said voice mode (see col. 5, line 10-22, 30-46; in modem mode, voice coder G.711 protocol, which provide pass-through or bypass mode with higher transmission bandwidth than in other voice coding protocol (e.g. G.729, G.723.1, etc)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a voice coder with higher bandwidth", as taught by Wildfeuer in the system of Focsaneanu, so that it would provide a modem pass-through to forward a stream of data with high speed/bandwidth G.711 coding protocol; see Wildfeuer col. 3, line 42-46; and by utilizing standard G.711 protocol, it would also provide compatibility and interoperability among networking gateways.

Regarding Claim 18, Focsaneanu discloses wherein said first gateway uses said data mode and said voice mode as set forth above in claim 12.

Fisher does not explicitly disclose "a voice coder with higher bandwidth".

However, Wildfeuer teaches wherein in said data mode (see col. 5, line 42-45; modem mode) said first gateway (see FIG. 1, packet network gateway 106) uses a voice coder (see FIG. 1, PCM controller 112) with higher bandwidth than in said voice mode (see col. 5, line 10-22, 30-46; in modem mode, voice coder G.711 protocol, which provide pass-through or bypass mode with higher transmission bandwidth than in other voice coding protocol (e.g. G.729, G.723.1, etc)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a voice coder with higher bandwidth", as taught by Wildfeuer in the system of Focsaneanu, so that it would provide a modem pass-through to forward a stream of data with high speed/bandwidth G.711 coding protocol; see Wildfeuer col. 3, line 42-46; and by utilizing standard G.711 protocol, it would also provide compatibility and interoperability among networking gateways.

9. Claim 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Focsaneanu in view of Wildfeuer as set forth above in claim 7 and 19, and further in view of Schuster (US006785261B1).

Regarding Claim 8, the combined system of Focsaneanu and Wildfeuer discloses wherein in said data mode said first gateway uses a G.711 voice coder and said voice mode as set forth above in claims 1 and 7.

Neither Focsaneanu Fisher nor Wildfeuer explicitly disclose "in voice mode uses G.723.1 voice coder".

However, using G.723.1 voice coder according to ITU standard is well known in the art for compatibility and interoperability. In particular, Schuster discloses in voice mode uses G.723.1 voice coder (see col. 10, line 55-65; see col. 11, line 50 to col. 12, line 30; G.723.1 voice coding).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "G.723.1 voice coder", as taught by Schuster, in the combined system of Focsaneanu and Wildfeuer, so that it would provide efficient vocoding; see Schuster col. 11, line 50-60.

Regarding Claim 19, the combined system of Focsaneanu and Wildfeuer discloses wherein in said data mode said first gateway uses a G.711 voice coder and said voice mode as set forth above in claims 12 and 18.

Neither Focsaneanu nor Wildfeuer explicitly disclose "in voice mode uses G.723.1 voice coder".

However, using G.723.1 voice coder according to ITU standard is well known in the art for compatibility and interoperability. In particular, Schuster discloses in voice mode uses G.723.1 voice coder (see col. 10, line 55-65; see col. 11, line 50 to col. 12, line 30; G.723.1 voice coding).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "G.723.1 voice coder", as taught by Schuster, in the combined system of Focsaneanu and Wildfeuer, so that it would provide efficient vocoding; see Schuster col. 11, line 50-60.

10. Claim 9, 10, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Focsaneanu in view of Goldstein (US 20030185222A1).

Regarding Claim 9, Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 1.

Focsaneanu does not explicitly disclose "a jitter buffer is larger in said voice mode than in said data mode".

However, Goldstein teaches wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is larger in said voice mode than in said data mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is dynamically set such that it is large enough to keep the delay as short as possible for voice service, than fax or modem service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is larger in said voice mode than in said data mode", as taught by Goldstein in the system of Focsaneanu, so that it would set a jitter buffer size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

Regarding Claim 10, Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 1.

Focsaneanu does not explicitly disclose "a jitter buffer is frozen in said data mode and is dynamic in said voice mode".

However, Goldstein discloses wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is frozen in said data

mode and is dynamic in said voice mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is set to static size for fax or modem service, and the buffer size is set to dynamic size for voice service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is frozen in said data mode and is dynamic in said voice mode", as taught by Goldstein in the system of Focsaneanu, so that it would set the jitter buffer to various size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

Regarding Claim 20, Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 12.

Focsaneanu does not explicitly disclose "a jitter buffer is larger in said voice mode than in said data mode".

However, Goldstein teaches wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is larger in said voice mode than in said data mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is dynamically set such that it is large enough to keep the delay as short as possible for voice service, than fax or modem service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is larger in said voice mode than in said data mode", as taught by Goldstein in the system of Focsaneanu, so that it would set a jitter buffer size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

Regarding Claim 21, Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 12.

Focsaneanu does not explicitly disclose "a jitter buffer is frozen in said data mode and is dynamic in said voice mode".

However, Goldstein discloses wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is frozen in said data mode and is dynamic in said voice mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is set to static size for fax or modem service, and the buffer size is set to dynamic size for voice service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is frozen in said data mode and is dynamic in said voice mode", as taught by Goldstein in the system of Focsaneanu, so that it would set the jitter buffer to various size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

11. Claims 1, 3-5, 12, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher (US 20040143620A1) in view of Focsaneanu (US005828666A).

Regarding Claim 1, Fisher discloses a communication method for use by a first gateway (see FIG. 1, ISP gateway 106; see page 2, paragraph 19 executing the methods/steps/processes (see FIG. 2)) for communication with a second gateway (see FIG. 1, Gateway GW 114) over a packet network (see FIG. 1, IP network 112), said first gateway having a plurality of modes of operation including a data mode (see page 2, paragraph 22; XoIP mode/form where X is Fax or

Modem (i.e. FoIP or MoIP)) and a voice mode (see page 2, paragraph 22; XoIP mode/form where X is voice (i.e. VoIP)), wherein said first gateway is configured differently for each of said modes of operation (see page 2, paragraph 22), said method comprising the steps of:

configuring said first gateway to said data mode of operation (see page 2, paragraph 22, 24; see page 3, paragraph 28,30; see FIG. 1, Remote Access Concentrator (RAC) 118 setting/configuring ISP gateway 106 to FoIP or MoIP mode/form for an internet access modem call/session);

receiving a call request from said second gateway (see FIG. 1, ISP gateway receiving the XoIP call request from gateway GW 114 of initiated by the remote client 120; see page 2, paragraph 22);

placing a call to a user (see FIG. 1, establishing/connecting/placing a call request to a client 120) over a communication line (see FIG. 1, over a connection/line between gateways, user/client 120 and user/client 110) in response to said receiving said call request (see FIG. 1, according/in-response to receive a XoIP call request; see page 2, paragraph 19-23; see FIG. 2, step 200,204);

enabling said first gateway to detect human voice or silence on said communication line (see FIG. 1, see page 2-3, paragraph 24, 26-28,32,33; Access Concentrator (RAC) 118 of ISP gateway 106 detects the voice call/request or silent/no-call/call-termination/no-voice of a FoIP/MoIP mode/form in the connection link/line; see page 3, paragraph 26-28,33);

maintaining said first gateway configured according to said configuration in said data mode of operation for said call if said voice and/or silence detector does not detect human voice or silence on said communication line (see page 2-3, paragraph 24, 26-28,33; note that when/if a

client does not request/make a new VoIP call, RAC of ISP detects no voice/silent/call-termination in the connection/link, and thus there is no need to hold/interrupt existing FoIP/MoIP form/mode (i.e. maintaining at a data mode according to data mode setting/configuration for the call request)), and

reconfiguring said first gateway to said voice mode for said call if said voice and/or silence detector detects human voice or silence on said communication line (see page 2-3, paragraph 24, 26-28; note that when/if a client request/make a new VoIP call, RAC of ISP detects voice in the connection and performs a modem on hold (MoHip) procedure by switching to VoIP mode/form (i.e. reconfiguration to voice mode for the call request)).

Fisher does not explicitly disclose "for a call".

However, configuring the gateway to "default" data mode of operation, different from existing procedure involving a PSTN where the default is POTS service, is so well known in the art. In particular, Focsaneanu teaches configuring said first gateway to said data mode of operation for a call (see col. 9, line 36 to col. 10, line 5; see FIG. 8, a combined system of processor 246 and controller 252 setting-up/configuration access module 234/306 a default state for data service call/connection);

receiving a call request from said second gateway (see FIG. 8, receiving a service request for a call/connection from access module 308/306; see col. 7, line 45 to col. 8, line 15; see col. 9, line 3-10);

placing said call (see FIG. 8, 9, setup/place a call/connection) to a user over a communication line (see FIG. 9, to user 300/302 on the line between two end users 300-302) in

response to said receiving said call request (see FIG. 8, when identifying a service request for a call/connection; see col. 7, line 45 to col. 8, line 15; see col. 9, line 3-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "configuring the gateway to "default" data mode of operation" as taught by Focsaneanu in the system of Fisher, so that it would provide better utilization by providing an intelligent connection as suggested by Focsaneanu; see Focsaneanu col. 4, line 10-39; see col. 9, line 42-45.

Regarding Claim 3, Fisher discloses said maintaining if said voice and/or silence detector does not detect human voice or silence on said communication line for a predetermined period of time (see page 2-3, paragraph 24, 26-28,33; note that when a client does not request/make a new VoIP call or the user does not wish to receive a call, RAC of ISP detects no voice/silent/call-termination in the connection between a client and gateway, and thus there is no need to hold/interrupt existing FoIP/MoIP form/mode (i.e. maintaining at a data mode). The FoIP/MoIP mode/form will be maintained for a predetermined period (i.e. FoIP/MoIP call duration) until a call in FoIP/MoIP mode/form terminates.)

Regarding Claims 4, Fisher discloses wherein said data mode is a modem mode and said user is a modem device (see FIG. 1, modem 122 with modem over IP (MoIP) mode/form; see page 2, paragraph 21-22).

Regarding Claim 5, Fisher discloses wherein said data mode is a modem mode and said user is a fax device (see FIG. 1, modem 122 with fax over IP (FoIP) mode/form; see page 2, paragraph 21-22).

Regarding Claim 12, Fisher discloses a first gateway (see FIG. 1, ISP gateway 106; see page 2, paragraph 19) for communication with a second gateway (see FIG. 1, Gateway GW 114) over a packet network (see FIG. 1, IP network 112), said first gateway having a plurality of modes of operation including a data mode (see page 2, paragraph 22; XoIP mode/form where X is Fax or Modem (i.e. FoIP or MoIP)) and a voice mode (see page 2, paragraph 22; XoIP mode/form where X is voice (i.e. VoIP)), wherein said first gateway is configured differently for each of said modes of operation (see page 2, paragraph 22), said first gateway comprising:

a configuration module (see FIG. 1, Remote Access Concentrator (RAC) 118) configuring said first gateway to said data mode of operation (see page 2, paragraph 22, 24; see page 3, paragraph 28,30; setting/configuring a FoIP or MoIP mode/form for an internet access modem call/session);

a voice and/or silence detector (see FIG. 1, Remote Access Concentrator (RAC) 118) enabled to detect human voice or silence on said communication line (see FIG. 1, Remote Access Concentrator (RAC) 118 of ISP 106 detects a new call, no call, or call termination over a connection/line between gateways, user/client 120 and user/client 110; see page 3, paragraph 26-28,32,33) when said first gateway places a call to user on a communication line (see FIG. 1, when ISP gateway 106 establishing/connecting/placing a call request to a client 120 over the connection line) in response to receiving a call request by said first gateway from said second gateway (see FIG. 1, according/in-response to a XoIP call request received by ISP gateway 106 from gateway GW 114 initiated by the remote client/user 120; see page 2, paragraph 19-23; see FIG. 2, step 200,204);

wherein said configuration module maintains said first gateway configured according to said data mode of operation for said call if said voice and/or silence detector does not detect human voice or silence on said communication line (see page 2-3, paragraph 24, 26-28,33; note that when/if a client does not request/make a new VoIP call, RAC of ISP detects no voice/silent/call-termination in the connection between a client and gateway, and thus there is no need to hold/interrupt existing FoIP/MoIP form/mode (i.e. maintaining at a data mode according to data mode setting/configuration for the request)), and said configuration module reconfigures said first gateway to said voice mode if said voice and/or silence detector detects human voice or silence on said communication line (see page 2-3, paragraph 24, 26-28; note that when/if a client request/make a new VoIP call, RAC of ISP detects voice in the connection and performs a modem on hold (MoHip) procedure by switching to VoIP mode/form (i.e. reconfiguration to voice mode for the call request)).

Fisher does not explicitly disclose "for a call".

However, configuring the gateway to "default" data mode of operation, different from existing procedure involving a PSTN where the default is POTS service, is so well known in the art. In particular, Focsaneanu teaches a configuration module (see FIG. 8, a combined system of processor 246 and controller 252) configuring said first gateway to said data mode of operation for a call (see col. 9, line 36- to col. 10, line 5; setting-up/configuration access module 234 or 306/308 to a default state for data service call/connection);

a voice and/or silence detector (see FIG. 8, transceiver 238) enabled to detect human voice or silence on a communication line (see FIG. 8, 9,detecting/identifying voice/POTS, or silent/no-service at initiation on the line between two end users 300 and 302; see col. 7, line 45-

67; see col. 9, line 3-10, 25-45, 55 to col. 10, line 12) when said first gateway places said call (see FIG. 8, 9, when access module 234 setup/place a call/connection) to a user on said communication line (see FIG. 9, to user 300/302 on the line between two end users 300-302) in response to receiving a call request by said first gateway from said second gateway (see FIG. 8, when identifying a service request for a call/connection by access module 306/308 from access module 308/306; see col. 7, line 45 to col. 8, line 15; see col. 9, line 3-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "configuring the gateway to "default" data mode of operation" as taught by Focsaneanu in the system of Fisher, so that it would provide better utilization by providing an intelligent connection as suggested by Focsaneanu; see Focsaneanu col. 4, line 10-39; see col. 9, line 42-45.

Regarding Claim 14, Fisher discloses said configuration module maintains said data mode configuration if said voice and/or silence detector does not detect human voice or silence on said communication line for a predetermined period of time (see page 2-3, paragraph 24, 26-28,33; note that when a client does not request/make a new VoIP call or the user does not wish to receive a call, RAC of ISP detects no voice/silent/call-termination in the connection between a client and gateway, and thus there is no need to hold/interrupt existing FoIP/MoIP form/mode (i.e. maintaining at a data mode). The FoIP/MoIP mode/form will be maintained for a predetermined period (i.e. FoIP/MoIP call duration) until a call in FoIP/MoIP mode/form terminates.)

Regarding Claim 15, Fisher discloses wherein said data mode is a modem mode and said user is a modem device (see FIG. 1, modem 122 with modem over IP (MoIP) mode/form; see page 2, paragraph 21-22).

Regarding Claim 16, Fisher discloses wherein said data mode is a modem mode and said user is a fax device (see FIG. 1, modem 122 with fax over IP (FoIP) mode/form; see page 2, paragraph 21-22).

12. Claims 2, 11, 13 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher in view of Focsaneanu and Baumann (US 20030118008A1).

Regarding Claim 2, Fisher discloses informing over said packet network of said data mode operation of said first gateway after said maintaining (see FIG. 1, ISP gateway 106 informs/transmits a busy signal over IP network 112 to inform that client/user 110 is currently engaging in MoIP/FoIP after maintaining in a data mode by not switching to VoIP mode; see page 2, paragraph 22; see page 3, paragraph 28; see page 4, paragraph 40-41), and said voice mode of operation of said first gateway after said reconfiguring (see page 3, paragraph 27-28; ISP 106 transmits/informs ANSam signal to switch/reconfigured to VoIP mode/form).

Neither Fisher nor Focsaneanu explicitly disclose "informing said second gateway".

However, sending ISP gateway sending busy signal to the caller via its gateway is so well known in the art. In particular, Baumann teaches said first gateway (see FIG. 1, a combined system of Media gateway B 4 and controller B 11) informs said second gateway (see FIG. 1, informs/notifies with a combined system of Media gateway A 3 and controller A 10) over said packet network (see FIG. through IP network 5) of said data mode of operation after said

configuration module maintain said data mode configuration (see FIG. 1, a combined system of gateways A sends notification to a combined system of gateways B regarding data/fax mode/form of operation after the controller assigns/maintain fax mode/form of operation; see page 2-3, paragraph 26,32,48), and said voice mode of operation of said first gateway after said configuration module (see FIG. 1, controller B 11) reconfigures to said voice mode (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding voice mode/form of operation after the gateway A terminate the fax transmission and switches (i.e. reconfiguration) to voice mode/form transmission).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "information the second media gateway", as taught by Baumann in the combined system of Fisher and Focsaneanu, so that it would allow changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

Regarding Claim 11, Fisher discloses said first gateway informs over said packet network of said mode of operation of said first gateway if said first gateway detects human or silence on said communication (see page 3, paragraph 27-28; ISP 106 transmits ANSam signal to switch/reconfigured to VoIP mode/form when ISP detects VoIP call request).

Neither Fisher nor Focsaneanu explicitly disclose "said first gateway informs said second gateway".

However, Baumann teaches said first gateway (see FIG. 1, a combined system of Media gateway B 4 and controller B 11) informs said second gateway (see FIG. 1, communicates/notifies a combined system of Media gateway A 3 and controller A 10) over said packet network (see FIG. 1, through IP network 5) of said mode of operation of said first

gateway if said first gateway detects human voice or silence on said communication (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding the mode/form of operation (i.e. voice) when the gateway A terminate the fax transmission (i.e. silent) or switches to voice transmission detecting of voice).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a first media gateway information the second media gateway", as taught by Baumann in the combined system of Fisher and Focsaneanu, so that it would allow changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

Regarding Claim 13, Fisher discloses said first gateway informs over said packet network of said data mode of operation of said first gateway after said configuration module maintains said data mode configuration (see FIG. 1, ISP gateway 106 informs/transmits a busy signal over IP network 112 to inform that client/user 110 is currently engaging in MoIP/FoIP after maintaining in a data mode by not switching to VoIP mode; see page 2, paragraph 22; see page 3, paragraph 28; see page 4, paragraph 40-41), and said voice mode of operation of said first gateway after said configuration module reconfigures to said voice mode (see page 3, paragraph 27-28; ISP 106 transmits ANSam signal to switch/reconfigured to VoIP mode/form).

Neither Fisher nor Focsaneanu explicitly disclose "informs said second gateway".

However, sending ISP gateway sending busy signal to the caller via its gateway is so well known in the art. In particular, Baumann teaches said first gateway (see FIG. 1, a combined system of Media gateway B 4 and controller B 11) informs said second gateway (see FIG. 1, informs/notifies with a combined system of Media gateway A 3 and controller A 10) over said

packet network (see FIG. through IP network 5) of said data mode of operation after said configuration module maintain said data mode configuration (see FIG. 1, a combined system of gateways A sends notification to a combined system of gateways B regarding data/fax mode/form of operation after the controller assigns/maintain fax mode/form of operation; see page 2-3, paragraph 26,32,48) , and said voice mode of operation of said first gateway after said configuration module (see FIG. 1, controller B 11) reconfigures to said voice mode (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding voice mode/form of operation after the gateway A terminate the fax transmission and switches (i.e. reconfiguration) to voice mode/form transmission).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "information the second media gateway", as taught by Baumann in the combined system of Fisher and Focsaneanu, so that it would allow changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

Regarding Claim 22, Fisher discloses said first gateway informs over said packet network of said mode of operation of said first gateway if said first gateway detects human or silence on said communication (see page 3, paragraph 27-28; ISP 106 transmits ANSam signal to switch/reconfigured to VoIP mode/form when ISP detects VoIP call request).

Neither Fisher nor Focsaneanu explicitly disclose "informs said second gateway".

However, Baumann teaches said first gateway (see FIG. 1, a combined system of Media gateway B 4 and controller B 11) informs said second gateway (see FIG. 1, communicates/notifies a combined system of Media gateway A 3 and controller A 10) over said packet network (see FIG. 1, through IP network 5) of said mode of operation of said first

gateway if said first gateway detects human voice or silence on said communication (see page 3, paragraph 52-55; a combined system of gateways A sends notification to a combined system of gateways B regarding the mode/form of operation (i.e. voice) when the gateway A terminate the fax transmission (i.e. silent) or switches to voice transmission detecting of voice).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a first media gateway information the second media gateway", as taught by Baumann in the combined system of Fisher and Focsaneanu, so that it would allow changing between voice transmission and a fax transmission; see Baumann page 1-2, paragraph 8, 26.

13. Claim 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher in view of Focsaneanu and Hansen (US005940475A).

Regarding Claim 6, Fisher discloses wherein said data mode is a modem mode and said user (see FIG. 1, modem 122 with modem mode/form; see page 2, paragraph 21-22).

Neither Fisher nor Focsaneanu explicitly disclose "a text telephone modem".

However, having TTY (teletypewriter or text telephone (TTY), which also known as TDD (Device for Deaf) for deaf, hearing impaired, and/or speech impaired individual's communication is well known in the art. In particular, Hansen teaches said user is a TTY modem (see col. 2, line 5-29; see col. 3, line 51 to col. 4, line 5; TDD or TTY modem).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a TTY or TDD modem", as taught by Hansen in the combined system of Fisher and Focsaneanu, so that it would provide enhance communication

systems and process used by the deaf, hearing impaired, and/or speech impaired community; see Hansen col. 2, line 59-66.

Regarding Claim 17, Fisher discloses wherein said data mode is a modem mode and said user (see FIG. 1, modem 122 with modem mode/form; see page 2, paragraph 21-22).

Neither Fisher nor Focsaneanu explicitly disclose "a TTY modem".

However, having TTY (teletypewriter or text telephone (TTY), which also known as TDD (Device for Deaf) for deaf, hearing impaired, and/or speech impaired individual's communication is well known in the art. In particular, Hansen teaches said user is a TTY modem (see col. 2, line 5-29; see col. 3, line 51 to col. 4, line 5; TDD or TTY modem).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a TTY or TDD modem", as taught by Hansen in the combined system of Fisher and Focsaneanu, so that it would provide enhance communication systems and process used by the deaf, hearing impaired, and/or speech impaired community; see Hansen col. 2, line 59-66.

14. Claim 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher in view of Focsaneanu and Wildfeuer (US006829244B1).

Regarding Claim 7, the combined system of Fisher and Focsaneanu discloses wherein said first gateway uses said data mode and said voice mode as set forth above in claim 1.

Neither Fisher nor Focsaneanu explicitly disclose "a voice coder with higher bandwidth".

However, Wildfeuer teaches wherein in said data mode (see col. 5, line 42-45; modem mode) said first gateway (see FIG. 1, packet network gateway 106) uses a voice coder (see FIG.

1, PCM controller 112) with higher bandwidth than in said voice mode (see col. 5, line 10-22, 30-46; in modem mode, voice coder G.711 protocol, which provide pass-through or bypass mode with higher transmission bandwidth than in other voice coding protocol (e.g. G.729, G.723.1, etc)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a voice coder with higher bandwidth", as taught by Wildfeuer in the combined system of Fisher and Focsaneanu, so that it would provide a modem pass-through to forward a stream of data with high speed/bandwidth G.711 coding protocol; see Wildfeuer col. 3, line 42-46; and by utilizing standard G.711 protocol, it would also provide compatibility and interoperability among networking gateways.

Regarding Claim 18, the combined system of Fisher and Focsaneanu discloses wherein said first gateway uses said data mode and said voice mode as set forth above in claim 12.

Neither Fisher nor Focsaneanu explicitly disclose "a voice coder with higher bandwidth".

However, Wildfeuer teaches wherein in said data mode (see col. 5, line 42-45; modem mode) said first gateway (see FIG. 1, packet network gateway 106) uses a voice coder (see FIG. 1, PCM controller 112) with higher bandwidth than in said voice mode (see col. 5, line 10-22, 30-46; in modem mode, voice coder G.711 protocol, which provide pass-through or bypass mode with higher transmission bandwidth than in other voice coding protocol (e.g. G.729, G.723.1, etc)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a voice coder with higher bandwidth", as taught by Wildfeuer in the combined system of Fisher and Focsaneanu, so that it would provide a modem

pass-through to forward a stream of data with high speed/bandwidth G.711 coding protocol; see Wildfeuer col. 3, line 42-46; and by utilizing standard G.711 protocol, it would also provide compatibility and interoperability among networking gateways.

15. Claim 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher in view of Focsaneanu and Wildfeuer as set forth above in claim 7 and 19, and further in view of Schuster (US006785261B1).

Regarding Claim 8, the combined system of Fisher, Focsaneanu and Wildfeuer discloses wherein in said data mode said first gateway uses a G.711 voice coder and said voice mode as set forth above in claims 1 and 7.

Neither Fisher, Focsaneanu, nor Wildfeuer explicitly disclose "in voice mode uses G.723.1 voice coder".

However, using G.723.1 voice coder according to ITU standard is well known in the art for compatibility and interoperability. In particular, Schuster discloses in voice mode uses G.723.1 voice coder (see col. 10, line 55-65; see col. 11, line 50 to col. 12, line 30; G.723.1 voice coding).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "G.723.1 voice coder", as taught by Schuster, in the combined system of Fisher, Focsaneanu and Wildfeuer, so that it would provide efficient vocoding; see Schuster col. 11, line 50-60.

Regarding Claim 19, the combined system of Fisher, Focsaneanu and Wildfeuer discloses wherein in said data mode said first gateway uses a G.711 voice coder and said voice mode as set forth above in claims 12 and 18.

Neither Fisher, Focsaneanu nor Wildfeuer explicitly disclose "in voice mode uses G.723.1 voice coder".

However, using G.723.1 voice coder according to ITU standard is well known in the art for compatibility and interoperability. In particular, Schuster discloses in voice mode uses G.723.1 voice coder (see col. 10, line 55-65; see col. 11, line 50 to col. 12, line 30; G.723.1 voice coding).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "G.723.1 voice coder", as taught by Schuster, in the combined system of Fisher, Focsaneanu and Wildfeuer, so that it would provide efficient vocoding; see Schuster col. 11, line 50-60.

16. Claim 9, 10, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher in view of Focsaneanu and Goldstein (US 20030185222A1).

Regarding Claim 9, the combined system of Fisher and Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 1.

Neither Fisher nor Focsaneanu explicitly disclose "a jitter buffer is larger in said voice mode than in said data mode".

However, Goldstein teaches wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is larger in said

voice mode than in said data mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is dynamically set such that it is large enough to keep the delay as short as possible for voice service, than fax or modem service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is larger in said voice mode than in said data mode", as taught by Goldstein in the combined system of Fisher and Focsaneanu, so that it would set a jitter buffer size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

Regarding Claim 10, the combined system of Fisher and Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 1.

Neither Fisher nor Focsaneanu explicitly disclose "a jitter buffer is frozen in said data mode and is dynamic in said voice mode".

However, Goldstein discloses wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is frozen in said data mode and is dynamic in said voice mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is set to static size for fax or modem service, and the buffer size is set to dynamic size for voice service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is frozen in said data mode and is dynamic in said voice mode", as taught by Goldstein in the combined system of Fisher and Focsaneanu, so that it would set the jitter buffer to various size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

Regarding Claim 20, the combined Fisher and Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 12.

Neither Fisher nor Focsaneanu explicitly disclose "a jitter buffer is larger in said voice mode than in said data mode".

However, Goldstein teaches wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is larger in said voice mode than in said data mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is dynamically set such that it is large enough to keep the delay as short as possible for voice service, than fax or modem service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is larger in said voice mode than in said data mode", as taught by Goldstein in the combined system of Fisher and Focsaneanu, so that it would set a jitter buffer size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

Regarding Claim 21, the combined system of Fisher and Focsaneanu discloses wherein said first gateway operating in voice mode than in said data mode as set forth above in claim 12.

Neither Fisher nor Focsaneanu explicitly disclose "a jitter buffer is frozen in said data mode and is dynamic in said voice mode".

However, Goldstein discloses wherein said first gateway (see FIG. 1, Media gateway 3) has a jitter buffer (see FIG. 2, jitter buffer 12), and wherein said jitter buffer is frozen in said data mode and is dynamic in said voice mode (see page 1-2, paragraph 3, 19-22; jitter buffer size is

set to static size for fax or modem service, and the buffer size is set to dynamic size for voice service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "a jitter buffer is frozen in said data mode and is dynamic in said voice mode", as taught by Goldstein in the combined system of Fisher and Focsaneanu, so that it would set the jitter buffer to various size by the control in real time without causing an interference; see Goldstein page 1, paragraph 6-7.

Response to Arguments

17. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **Nimmagadda (US006426961B1)** - ADSL gateway system where at state 1, data mode is operation in default mode, when switch to voice mode upon detection of voice.
- **Nguyen (US005838748A)** - system the data mode is a default mode.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN N. MOORE whose telephone number is (571)272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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